



Aviation Investigation Final Report

Location:	HARRAH, Washington	Accident Number:	SEA82DA112
Date & Time:	July 15, 1982, 07:15 Local	Registration:	N6145C
Aircraft:	BELL 47G-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PILOT REPORTED THAT BEFORE TAKING OFF, THE FUEL QUANTITY GUAGES INDICATED THERE WAS SUFFICIENT FUEL TO COMPLETE ONE MORE LOAD AND STILL HAVE AN ADEQUATE RESERVE. AFTER DISPENSING THE LOAD, THE ENGINE LOST POWER WHILE HE WAS RETURNING TO THE NURSE TRUCK. AT THAT TIME, THE HELICOPTER WAS AT ABOUT 100 FT AGL AND WAS ABOUT TO CROSS A POWER LINE. THE PILOT TURNED TO AVOID THE POWER LINE AND LEVELED THE HELICOPTER, BUT IT LANDED HARD. THE HELICOPTER WAS SUBSTANTIALLY DAMAGED AND THE PILOT RECEIVED A COMPRESSION FRACTURE OF A VERTEBRA. AN EXAMINATION REVEALED THAT BOTH FUEL TANKS WERE EMPTY AND NO SIGN OF A FUEL LEAK WAS FOUND.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - ERRATIC

- 3. (C) FLUID,FUEL - EXHAUSTION
- 4. (C) FUEL SUPPLY - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 5. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 6. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
- 7. MANEUVER - PERFORMED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1728 hours (Total, all aircraft), 673 hours (Total, this make and model), 1365 hours (Pilot In Command, all aircraft), 77 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N6145C
Model/Series:	47G-2 47G-2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	2182
Landing Gear Type:	Skid	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	80 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8993 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TVO-435-25A
Registered Owner:	ROBERT C. MARTIN	Rated Power:	260 Horsepower
Operator:	ROBERT C. MARTIN	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	YKM	Distance from Accident Site:	10 Nautical Miles
Observation Time:	13:55 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 7000 ft AGL	Visibility	50 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	50°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HARRAH , WA	Type of Flight Plan Filed:	None
Destination:	HARRAH , WA	Type of Clearance:	None
Departure Time:	17:10 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	46.400115,-120.640365(est)

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: July 15, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=70966>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).